

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method comprising:
forming at least a portion of an object by curing resin;
providing a storage device containing a liquid, the liquid comprising solvent and dissolved resin, the liquid having a ratio of the dissolved resin to the solvent;
removing an amount of resin from the object by submersing the object in the liquid in the storage device in a manner such that the amount of resin becomes dissolved in the liquid and thereby increases the ratio of the dissolved resin to the solvent of the liquid, the increase of the ratio altering an electrical characteristic of the liquid; and
utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the solvent of the liquid; and
using said changes in the electrical characteristic of the liquid to drive a visual display that is able to provide a plurality of different indications as to said ratio.

2. (Currently Amended) The method in accordance with claim 1, wherein the curing of the resin in the step of forming at least the portion of the object occurs via a laser.

3. (Cancelled)

4. (Currently Amended) The method in accordance with claim 1₁ wherein the electrical characteristic is a conductivity of the liquid.

5. (Currently Amended) The method in accordance with claim 1₁ wherein the solvent recited in the steps is Tripropylene Glycol Methyl Ether.

6. (Currently Amended) The method in accordance with claim 1₁ wherein utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the solvent of the liquid is performed to determine whether the ratio exceeds a desired range, and wherein the method further comprises removing at least some of the liquid from the storage device and adding solvent to the storage device after determining that the ratio exceeds the desired range.

7. (Currently Amended) The method in accordance with claim 6₁ wherein the electrical characteristic recited is a conductivity of the liquid.

8. (Currently Amended) The method in accordance with claim 1₁ wherein utilizing said changes in the electrical characteristic of the liquid ~~as an indicator of the ratio of the dissolved resin to the solvent of the liquid~~ to drive a display comprises visually indicating different ranges of the ratio via illumination and non-illumination of at least one light-emitting diode.

9. (Currently Amended) The method in accordance with claim 8, wherein utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the dissolved resin to the solvent of the liquid comprises visually indicating at least three different ranges of the ratio via illumination and non-illumination of at least two light-emitting diodes.

10. (Currently Amended) A method comprising:
forming at least a portion of an object by curing resin;
providing a storage device containing a liquid, the liquid comprising solvent and dissolved resin, the liquid having at least one electrical characteristic;
removing an amount of resin from the object by submersing the object in the liquid in the storage device such that the amount of resin becomes dissolved in the liquid and thereby alters the electrical characteristic of the liquid;
removing an amount of the liquid from the storage device and adding solvent to the storage device in response to a measurement of the electrical characteristic of the liquid, the solvent added to the storage device thereby altering the electrical characteristic of the liquid in the storage device; and
using said measurement of the electrical characteristic of the liquid to drive a display device that is able to visually indicate a plurality of different conditions of said liquid.

11. (Currently Amended) The method in accordance with claim 10, wherein the curing of the resin forming at least the portion of the object occurs via a laser.

12. (Cancelled)

13. (Currently Amended) The method in accordance with claim 10, wherein the electrical characteristic in removing the amount of the liquid from the storage device and adding solvent to the storage device is a conductivity of the liquid.

14. (Currently Amended) The method in accordance with claim 10, wherein visually indicating a plurality of different conditions of said liquid comprises further comprising visually indicating different measurement ranges of the electrical characteristic via illumination and non-illumination of at least one light-emitting diode.

15. (Currently Amended) The method in accordance with claim 14, wherein visually indicating different measurement ranges comprises visually indicating at least three different measurement ranges via illumination and non-illumination of at least two light-emitting diodes.

16. (Currently Amended) The method in accordance with claim 14, wherein the electrical characteristic removing the amount of the liquid from the storage device and adding solvent to the storage device is a conductivity of the liquid.

17. (Currently Amended) A method comprising:
forming an object by curing a resin with a laser;

providing a storage device containing a liquid, the liquid comprising solvent and solute, the liquid having a ratio of the solute to the solvent;

removing an amount of material by submersing the object in the liquid in the storage device such that the amount of material becomes additional solute in the liquid and thereby increases the ratio of the solute to the solvent of the liquid, the increase of the ratio altering an electrical characteristic of the liquid, the liquid comprising Tripropylene Glycol Methyl Ether; and

utilizing changes in the electrical characteristic of the liquid as an indicator of the ratio of the solute to the solvent of the liquid; and

using a plurality of display elements to visually indicate changes in said ratio.

18. (Withdrawn) An assembly comprising:

a storage device that is configured and adapted to store liquid;
an amount of liquid stored in the storage device, the liquid comprising solvent and dissolved resin; and

a monitoring device in communication with the liquid in the storage device, the monitoring device being adapted and configured to pass an electric current through at least some of the liquid and to produce a plurality of signals indicative of a plurality of conditions of conductivity of the liquid in the storage device.

19. (Withdrawn) An assembly in accordance with claim 18 wherein the monitoring device comprises at least one light-emitting diode, the light-emitting diode

being configured to emit light in response to at least one of the signals produced by the monitoring device.

20. (Withdrawn) An assembly in accordance with claim 18 wherein the monitoring device is adapted and configured to produce a plurality of signals indicative of at least three conditions of conductivity of the liquid in the storage device.

21. (Withdrawn) An assembly in accordance with claim 20 wherein the monitoring device comprises at least two light-emitting diodes, the monitoring device be configured and adapted to selectively alter light emission from each of the two light-emitting diodes in a manner to display at least three separate visual identifiers, the monitoring device being further adapted and configured to display a different one of the visual identifiers in response to each of the plurality of signals indicative of the at least three conditions of conductivity of the liquid in the storage device.